What is claimed is:

1   1.   A hyperlinked broadcast system comprising:

2   a video source providing video information;

3   an annotation system generating annotation data to be associated with said

4   video information and generating annotation data timing information; and

5   an augmented video information transmission generator receiving said

6   annotation data, said video information, and said annotation data timing

7   information, said augmented video information transmission generator generating

8   an augmented video transmission signal comprising said annotation data, said

9   annotation data timing information, and said video information,

10   wherein said augmented video information transmission generator associates said

11   video information with said annotation data using said annotation data timing

12   information.

1   2.   The system of claim 1 wherein said augmented video information

2   transmission generator comprises a vertical blanking interval insertion device.

1   3.   The system of claim 1 wherein said augmented video information

2   transmission generator comprises at last one of a vertical ancillary data insertion device

3   and a digital video data multiplexer.

1   4.   The system of claim 1 wherein said annotation data timing information

2   comprises at least one of timestamp information, timecode information, frame numbering

3   information, global time of day information, annotation data device commands, and a

4   video program identifier.

1   5.   The system of claim 1 wherein said video information comprises digital

2   video data.

1   6.   The system of claim 1 wherein said video information comprises an

2   analog video signal.

1   7.   The system of claim 1 further comprising:

2   a post production environment; and

3   a headend comprising said augmented video information transmission

4 generator,

5 wherein said video information and said annotation data timing information are

6 combined by said post production environment and transmitted to said headend.

1   8.   The system of claim 7 wherein said headed is a cable headend.

1   9.   The system of claim 7 wherein said headend is a satellite headend.

1   10.   The system of claim 1 further comprising:

2   a post production environment;

3   a broadcast network; and

4   a headend comprising said augmented video information transmission

5 generator,

6 wherein said video information and said annotation data timing information are

7 combined by said post production environment and transmitted to said broadcast network

8 for subsequent transmission to said headend.

1   11.   The system of claim 10 wherein said headend is a cable headend.

1   12.   The system of claim 10 wherein said headend is a satellite headend.

1   13.   The system of claim 1 further comprising:

2   a receiver in communication with said augmented video information

3 transmission generator; and

4   a display device in communication with said receiver,

5 wherein said receiver synchronizes said annotation data with said video

6 information on a frame by frame basis.

1   14. The system of claim 13 wherein said display device displays said

2 annotation data in response to a viewer request.

1 . 15. The system of claim 1 wherein said annotation data comprises at least one

2 of mask data, textual data, and graphics data.

1   16. The system of claim 15 wherein said mask data comprises at least one of a

2 graphics presentation and a textual presentation.

1   17. The system of claim 15 wherein said mask data comprises location

2 information of an object in an annotated video frame.

1   18. The system of claim 17 wherein said location information includes a

2 graphics location reference that represents a fixed relation to a set of pixels associated

3 with said object.

1 . 19. The system of claim 18 wherein said graphics location reference includes

2 an upper left most pixel in said associated pixel set.

1   20. The system of claim 18 wherein said graphics location reference includes

2 a centroid pixel of said associated pixel set.

1   21. The system of claim 15 wherein said mask data comprises location and

2 shape information of an object in a video fame to be annotated.

1   22. A hyperlinked transmission assembly system comprising:

2   an annotation data stream generator capable of accessing annotation data;

3   a video information source providing video information;

4   an annotation data timing information decoder in communication with said

5 . annotation data stream generator and said video information source, said

6   annotation data timing information decoder extracting annotation data timing

7   information from said video information; and

8   an augmented video information transmission generator in communication

9   with said annotation data stream generator and said video information source,

10   wherein said video information transmission generator synchronizes said video

11   information with said annotation data based on said annotation data timing information.

1   23.   The system of claim 22 wherein said video information transmission

2   generator synchronizes said video information with said annotation data on a frame by

3   frame basis.

1   24.   The system of claim 22 wherein said annotation data timing information

2   decoder is a vertical blanking interval decoder.

1   25.   The system of claim 22 wherein said annotation data timing information

2   decoder is at least one of a vertical ancillary data decoder and a digital transport stream

3   decoder.

1   26.   The system of claim 22 wherein said annotation data storage device is

2   capable of accessing said annotation data at least as early as said annotation data stream

3   generator receives said annotation data timing information.

1   27.   The system of claim 22 wherein said annotation data stream generator

2   accesses said annotation data from an internal storage device.

1   28.   The system of claim 22 wherein said annotation data stream generator

2   accesses said annotation data from an external storage device.

1   29.   The system of claim 22 wherein said annotation data stream generator

2   streams said annotation data in response to said annotation data timing information.

1   30.   The system of claim 22 wherein said annotation data timing information

2   comprises at least one of timestamp information, timecode information, frame numbering

3   information, global time of day information, annotation data device commands, and video

4   program identifier.

1   31.   The system of claim 22 wherein said annotation data comprises at least

2   one of mask data, textual data, and graphics data.

1   32.   A hyperlinked reception system comprising:

2   a receiver in communication with a broadcast channel; and

3   a display device in communication with said receiver,

4   wherein said receiver synchronizes mask data with associated video information

5   on a frame by frame basis in response to timing information.

1   33.   The system of claim 32 wherein said receiver comprises a timer to

2   calculate an offset from said timing information to synchronize said mask data with said

3   associated video information.

1   34.   The system of claim 32 wherein said timing information comprises at least

2   one of timestamp information, timecode information, frame numbering information,

3   global time of day information, receiver commands, and video program identifier.

1   35.   A method of generating a hyperlinked video signal comprising:

2   generating annotation data timing information from video information;

3   generating annotation data for said video information;

4   communicating said annotation data timing information, said annotation

5   data, and said video information to an augmented video information transmission

6   generator; and

7   synchronizing said video information with said annotation data in

8   response to said annotation data timing information by said augmented video

9   information transmission generator.

1   36.   The method of claim 35 wherein said augmented video information

2 transmission generator comprises a vertical blanking interval insertion device.

1   37.   The method of claim 35 wherein said augmented video information

2 transmission generator comprises at least are of a vertical ancillary data insertion device

3 and a digital video data multiplexer.

1   38.   The method of claim 35 wherein said annotation data timing information

2 comprises at least one of timestamp information, timecode information, frame numbering

3 information, global time of day information, annotation data device commands, and a

4 video program identifier.

1   39   The method of claim 35 wherein said video information comprises digital

2 video data.

1   40.   The method of claim 35 wherein said video information comprises an

2 analog video signal.

1   41.   The method of claim 35 further comprising inserting said annotation data

2 timing information in a vertical blanking interval of an analog video signal.

1   42.   The method of claim 35 further comprising inserting said annotation data

2 timing information in a vertical ancillary data region of a digital video signal.

1   43.   The method of claim 35 wherein said communicating step comprises

2 transmitting said timing information and said video information to a broadcast network

3 and subsequently to said augmented video information transmission generator.

1   44.   The method of claim 35 wherein said annotation data comprises at least

2 one of mask data, textual data, and graphics data.

1   45.   The method of claim 44 wherein said mask data comprises at least one of
2   a graphics presentation and a textual presentation.

1   46.   The method of claim 44 wherein said mask data comprises location
2   information of an object in an annotated video frame.

1   47.   The method of claim 46 wherein said location information includes a
2   graphics location reference that represents a fixed relation to a set of pixels associated
3   with said object.

1   48.   The method of claim 47 wherein said graphics location reference includes
2   an upper left most pixel in said associated pixel set.

1   49.   The method of claim 48 wherein said graphics location reference includes
2   a centroid pixel of said associated pixel set.

1   50.   The method of claim 44 wherein said mask data comprises location and
2   shape information of an object in an annotated video frame.

1   51.   The method of claim 50 wherein said shape information is represented by
2   a graphical overlay of said object.

1   52.   The method of claim 50 wherein said shape information is represented by
2   an outline of said object.